Pulse plating is also especially valuable for investigating the problem of polymer formation in hard gold deposits. It increases the amount of cobalt and nickel in the deposits drastically, and at the same time reduces their contents of carbon, hydrogen, oxygen and nitrogen. With gold-nickel electrolytes, it is possible by pulse plating to produce bright deposits with high nickel but low polymer concentrations.

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Automatic Gold Plating of Edge Connectors

To provide the complex printed circuit boards required for the new reed-electronic TXE4 system adopted by the British Post Office for the modernisation of their telephone networks as well as for military applications a new electroplating facility has been established by Exacta Circuits of Selkirk in Scotland, a subsidiary company of ITT.

To complete the boards, the edge connectors need to be gold plated, and this is carried out in a newly installed automatic plant built by Kirkby Process and Equipment of Liverpool capable of handling 80 to 90 boards per hour. The electrolyte, an acid cyanide cobalt-gold, was developed by Sel-Rex for this type of process. The gold deposits, 5 μm in thickness, are tested for porosity and for thickness. The consumption of gold runs to some 30 to 35 kilogrammes a year.